

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions of claims in the application.

1. (Currently amended): A flat security element, having a front side and a reverse side, and being relatively small in size, such as planchettes, ~~characterized in that~~ wherein it includes, at least on one of its sides, at least one in-register authentication pattern and/or an authentication pattern resulting from the combination and/or superposition of a pattern on its front side and of a pattern on its reverse side, at least one of said authentication patterns being at least partly observable in transmitted light.
2. (Currently amended): The security element as claimed in claim 1, ~~characterized in that~~ wherein said in-register authentication pattern is in register either with respect to at least one portion of the shape of said security element or with respect to at least one portion of said patterns.
3. (Currently amended): The security element as claimed in ~~either of claims 1 and 2,~~ ~~characterized in that~~ claim 1, wherein one of the patterns on the front side and/or on the reverse side is an in-register pattern.
4. (Currently amended): The security element as claimed in ~~one of claims 1 to 3,~~ ~~characterized in that~~ claim 1, wherein said element includes, as pattern on the front side, at least one given color and as pattern on the reverse side at least one other given color, said authentication pattern observed in transmitted light being the color resulting from the color on the reverse side and the color on the front side.
5. (Currently amended): The security element as claimed in the preceding claim 4, ~~characterized in that~~ wherein the colors on the front and reverse sides are chosen from primary colors.

6. (Currently amended): The security element as claimed in ~~one of claims 1 to 5, characterized in that claim 1, wherein~~ one of said patterns is a pattern in the form of a geometric pattern, in particular in alphanumeric form, and/or in the form of a grid and/or lines and/or dots.

7. (Currently amended): The security element as claimed in ~~one of the preceding claims, characterized in that claim 1, wherein~~ the dimensions of said element are between 0.5 and 6 mm, preferably between 1 and 4 mm.

8. (Currently amended): The security element as claimed in ~~one of the preceding claims, characterized in that claim 1, wherein~~ it has a geometric shape, especially a circular, triangular, oval, square or rectangular shape, or a star shape, moon shape or a shape with curved edges.

9. (Currently amended): The security element as claimed in ~~one of the preceding claims, characterized in that claim 1, wherein~~ it includes printing in an amount of 1 to 10 g/m² per side, preferably between about 2 and 5 g/m² per side, by dry weight.

10. (Currently amended): The security element as claimed in ~~one of the preceding claims, characterized in that claim 1, wherein~~ said element includes patterns chosen from those that are visible in natural light or visible in UV light, that are luminescent, particularly fluorescent or phosphorescent, that are detectable by near or medium infrared radiation, that are thermochromic or piezochromic, that are based on DNA traces, that are optically variable, especially iridescent, or based on liquid crystals or on diffraction gratings or on moiré patterns or holograms, or that are electromagnetic, or combinations thereof.

11. (Currently amended): The security element as claimed in claim 10, ~~characterized in that wherein~~ said element includes, beneath or alongside said patterns, printing of electromagnetic, especially magnetic, character and, in particular, continuous tracks or codes in the form of magnetic bits.

12. (Currently amended): The security element as claimed in ~~one of the preceding claims, characterized in that claim 1, wherein~~ at least one of the patterns is visible to the naked eye.

13. (Currently amended): The security element as claimed in ~~one of the preceding claims, characterized in that claim 1, wherein~~ said element includes chemical authentication reactants, or reactants that reveal a specific event.

14. (Currently amended): The security element as claimed in ~~one of the preceding claims, characterized in that claim 1, wherein~~ said security element has a medium chosen from a fibrous sheet, a plastic film and a complex of these materials.

15. (Currently amended): The security element as claimed in claim 14, ~~characterized in that wherein~~ said medium has a low basis weight, in particular between 25 and 40 g/m², and/or a thickness between about 50 and 110 µm.

16. (Currently amended): The security element as claimed in ~~either of claims 14 and 15, characterized in that claim 14, wherein~~ said fibrous sheet of said medium is based on natural and/or synthetic fibers.

17. (Currently amended): The security element as claimed in claim 16, ~~characterized in that wherein~~ said fibrous sheet is a paper based on cellulose fibers refined to a low degree, of the overlay type.

18. (Currently amended): The security element as claimed in ~~either of claims 14 or 15, characterized in that claim 14, wherein~~ the plastic film of said element is a polyester film.

19. (Currently amended): The security element as claimed in ~~one of claims 14 to 18, characterized in that claim 14, wherein~~ said element is based on a bulk-opacified medium or on a medium having, on at least one of its sides, at least partly, a full or partial color, opacifying or barrier layer or printing.

20. (Currently amended): A security sheet comprising a fibrous substrate that includes several flat security elements of relatively small size, such as those described in claim[[s]] 1 [[to 19]].

21. (Currently amended): The security sheet as claimed in the preceding claim 20, ~~characterized in that wherein~~ said security elements are arranged in the form of a band and/or randomly distributed within said substrate.

22. (Currently amended): A security document obtained from a sheet as claimed in ~~either of~~ claim[[s]] 20 ~~and 21~~.

23. (Currently amended): A process for manufacturing security elements, which include an in-register pattern as described in claim[[s]] 1 [[to 19]], comprising the following steps:

- at least one portion of said authentication patterns is printed in one or more steps on one of the sides of its medium;
- at least one portion of said authentication patterns is printed, where appropriate on the other side, in one or more steps, either by being in register with respect to at least one portion of the shape of said element or by being in registration with respect to the previously printed portion.

24. (Currently amended): The manufacturing process as claimed in claim 23, ~~characterized in that wherein~~ the printed medium is cut in registration into security elements of the desired shape and such that at least the in-register pattern is wholly present on said element.